

REMARKS

The Applicant wishes to thank the Examiner for his examination of the present application. Please note that the applicant has made minor corrections to the specification. No new matter has been added with these corrections. Applicant has also added additional dependent claims 20-24. Again, no new matter has been added. Claim 19 has been cancelled. Claims 1-18 and 20-24 are currently pending in this application. The claims have been amended to more clearly describe the novelty of the invention.

SPECIFICATION

The Applicant notes that the paragraph beginning at page 15 line 14 of the specification has been amended to correct some typographical errors. For example, the DMR element was incorrectly labeled with number 1110, whereas the DMR is properly referenced by number 1010. Additionally, the terminology used to describe the demultiplexing process was incorrectly referenced as a multiplexing process. The device marked 1040 in Fig. 10 performs both demultiplexing and multiplexing depending on whether the data is being compressed or decompressed respectively. However, the text of the paragraph beginning at page 15 line 14 references demultiplexing and therefore element 1040 is referred to as a demultiplexor during the process of compression.

DRAWINGS

Applicant has updated the drawings in accordance with the Examiner's suggestion. A clean copy of the amended figures along with a copy of the figures marked in red accompanies this response. Fig. 2 now includes the words "Digital Video System Chip" inside of each box labeled 15. Fig. 7A now includes the word "Bus" for element 810. Fig. 8 has been amended such that the blocks 650A-650C each include the word "CODEC." Fig. 10 now includes the label "De-Mux" in each box labeled 1040. It is believed that the drawings are now in the proper form and the objection is overcome.

35 U.S.C. 112

Claim 19 was rejected based upon 35 U.S.C. 112, second paragraph for indefiniteness. Claim 19 has been cancelled.

35 U.S.C. 102(e)

The office action rejects claim 1-4 and 7-19 as being anticipated by published patent application (US 2002/0057844) to Sirohey et al.

The present invention as claimed in independent claim 1 is directed to a scalable motion image compression system. The system allows for decomposing a digital video stream through a decomposition module where the digital video stream is transmitted in real-time at a transmission rate. The decomposition module decomposes the digital video stream into a number of component parts and forwards the decomposed video stream to a compression module. The compression module contains a plurality of compression blocks that each process in parallel separate component parts of the digital video stream.

The Sirohey reference is directed an image data management system that decomposes and tessellates sub-band blocks of an image for easy transmission and distribution as defined in the Abstract. The system is preferably used for the storage and transmission of medical image, such as a portion of an MRI image See page 2 paragraph 36. It should be noted that the Sirohey reference is applicable to a compression of individual images (for example, see paragraph 45), whereas the present invention is directed to a scalable system for compression of a motion image video stream. As a result, independent claim 1 clearly distinguishes the Sirohey reference and is therefore allowable.

Additionally, as shown in Fig. 1 of the Sirohey reference, the image management system includes a single compression/decompression interface 20. The text of the Sirohey reference at paragraph 39 states that a compression/decompression library is coupled to interface 20 and that the library stores the routines and algorithms used by the interface. Thus, the interface 20 accesses the software routines and processes the image according to the algorithm. Nowhere in the reference is the compression/decompression module described as containing a plurality of compression units that operate in parallel to process sections of the decomposed image as required by the claims.

Further still, the Sirohey reference does not teach a system that decomposes the video stream into component parts and passes the component parts to a compression module at the transmission rate of the video stream wherein the component parts are processed in parallel. The office action suggests that this is shown in Fig. 15, however Fig. 15 is directed to the process flow of data for a single image. The Fig. does not show multiple compression units. In fact, the process flow of Fig. 15 cannot process a digital video stream in substantially real-time as required by independent claim 1, since each

subsequent level of the wavelet decomposition must wait until the previous level's decomposition is complete. Thus, the system would fail with a digital video image stream.

Therefore, independent claim 1 is allowable over the art of record. Additionally, dependent claims 2-18 and 20-24 each depend from independent claim 1 and add at least one additional limitation. The dependent claims are allowable for at least the same reasons as independent claim 1.

35 U.S.C. 103

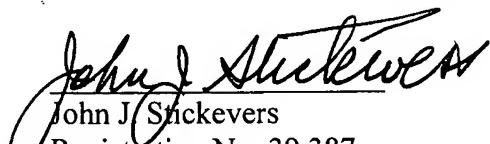
With regard to the 35 U.S.C. 103 rejections of dependent claims 5 and 6, the Sirohey reference does not teach each and every limitation of independent claim on which claims 5 and 6 depend. As a result, claims 5 and 6 can not be obvious in view of the Sirohey reference and are therefore, allowable over the art of record.

It is believed the application is now in condition for allowance. Reconsideration of the claims and issuance of a notice of allowance are respectfully requested.

If any matter arises which may expedite issuance of a notice of allowance, the Examiner is requested to call the undersigned, at the telephone number given below.

It is believed no extension is required for this application, but if an extension is required, the applicant respectfully petitions for such an extension. Please charge deposit account number 19-4972 for the extension fees. If any additional fees are required for the timely consideration of this application, please charge deposit account number 19-4972.

Respectfully submitted,


John J. Stickevers
Registration No. 39,387
Attorney for Applicant

BROMBERG & SUNSTEIN LLP
125 Summer Street
Boston MA 02110-1618
Tel: 617 443 9292 Fax: 617 443 0004
02418/00125 495109.1



Applicant: Goertzen, Kenbe
Title: Scalable Programmable Motion Image System
Application No.: 10/076,215
Filing Date: February 13, 2002
Docket No.: 2418/125
Annotated Sheet 1 of 12 Showing Changes

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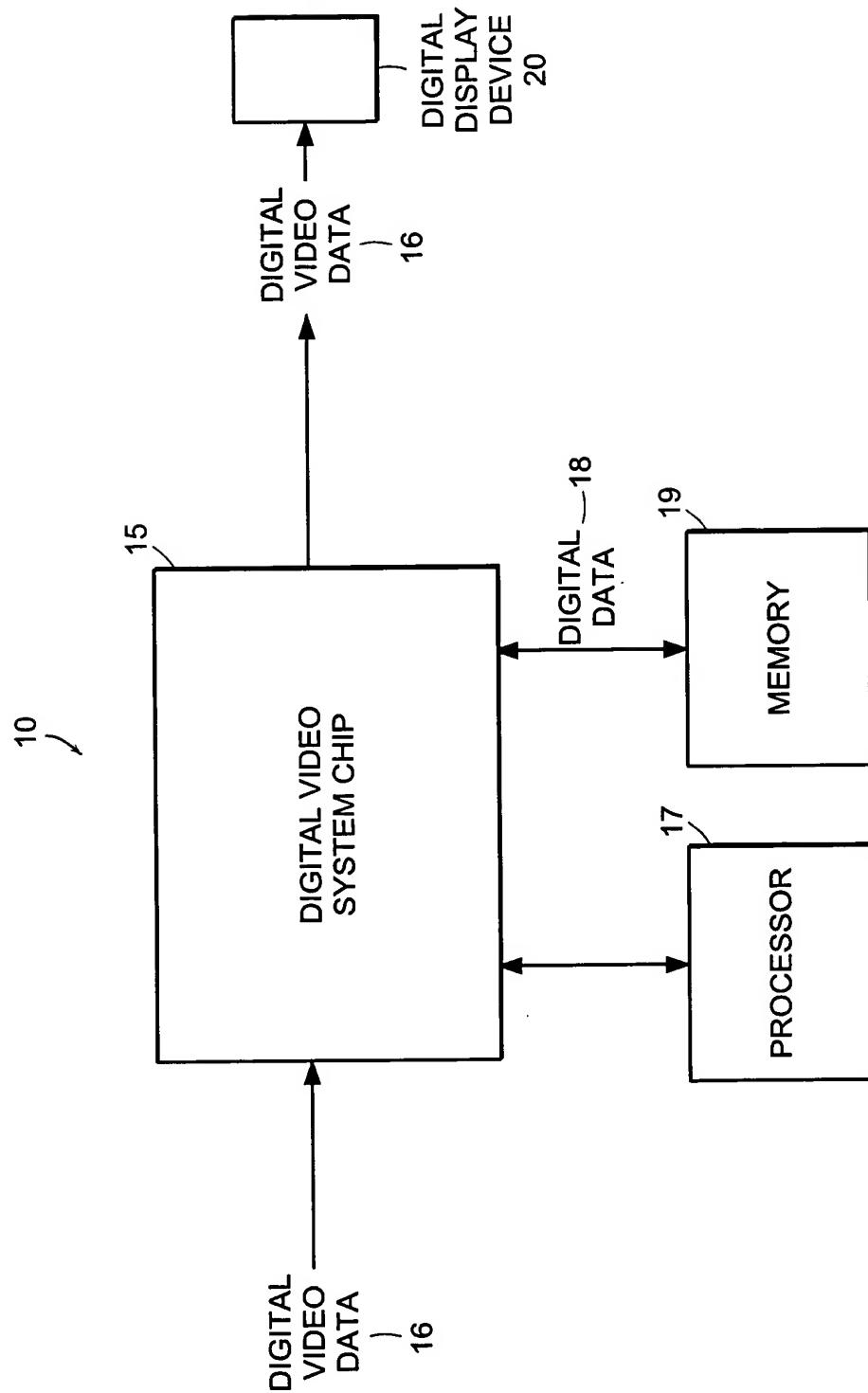


FIG. 1

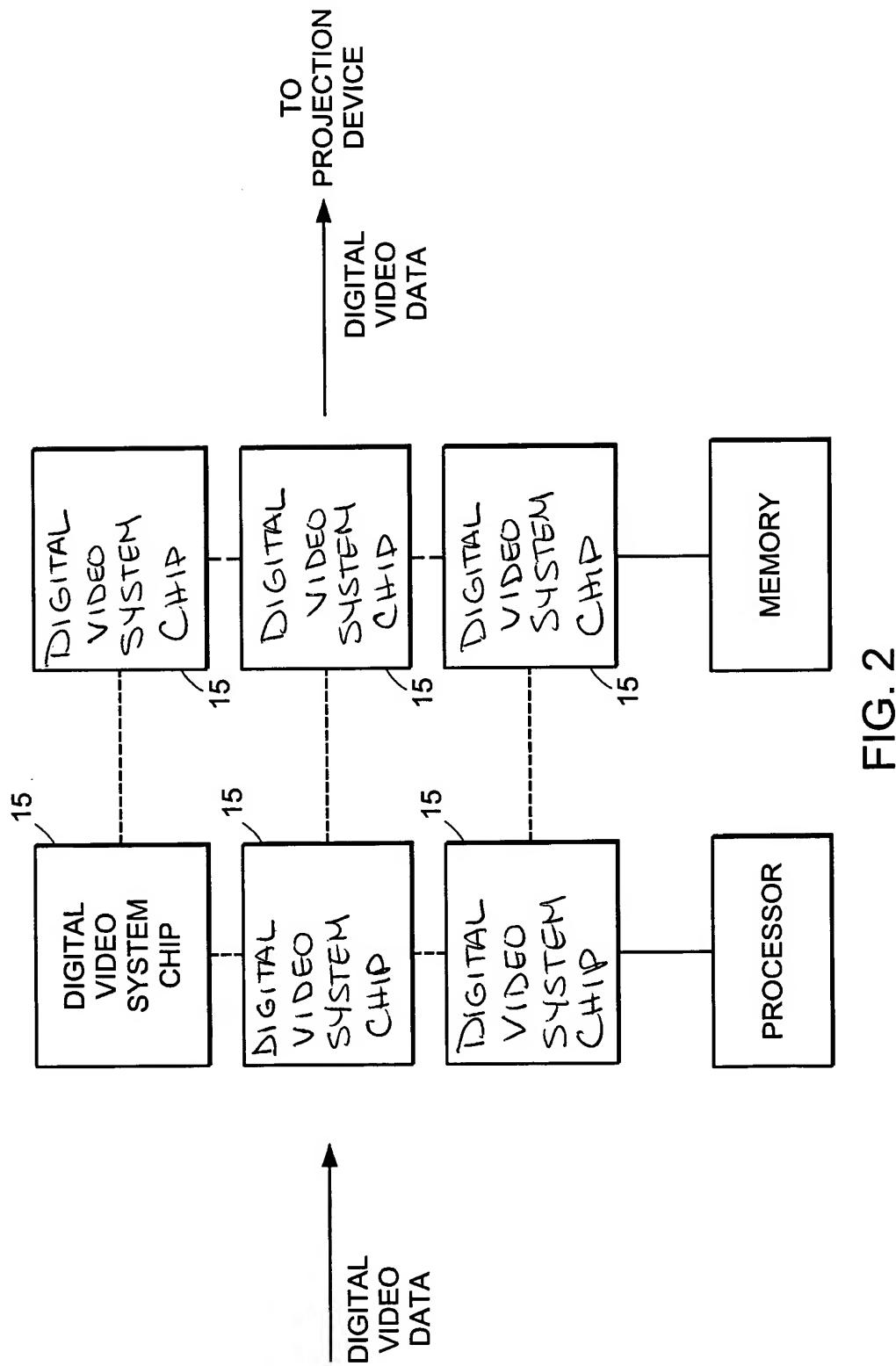


FIG. 2

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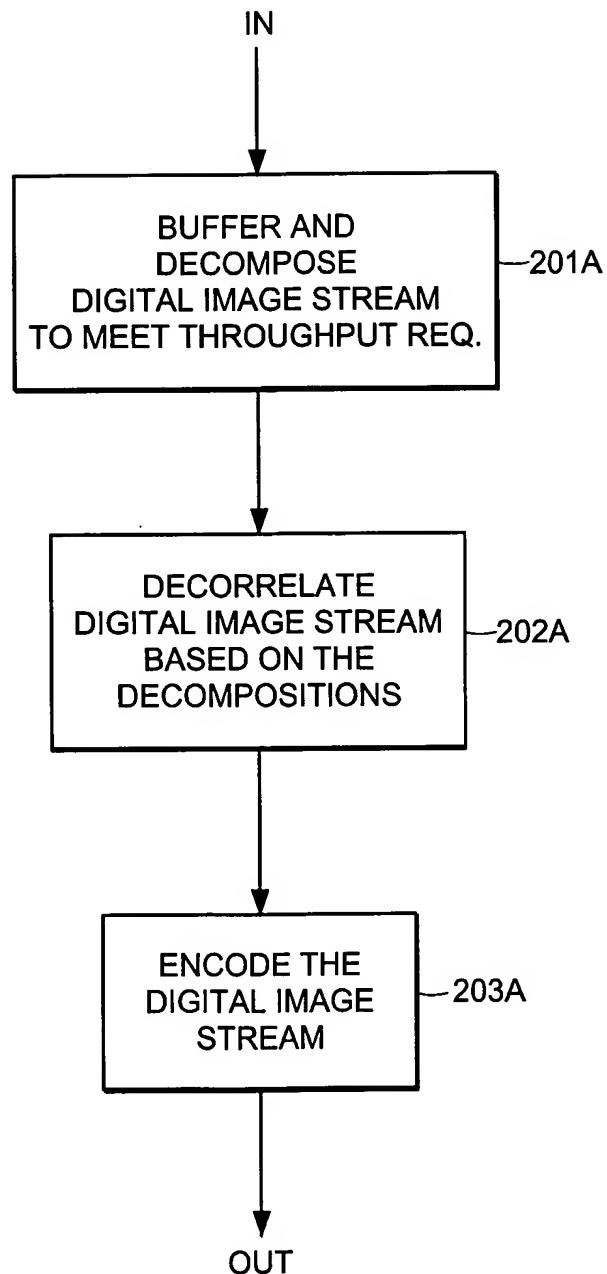


FIG. 2A

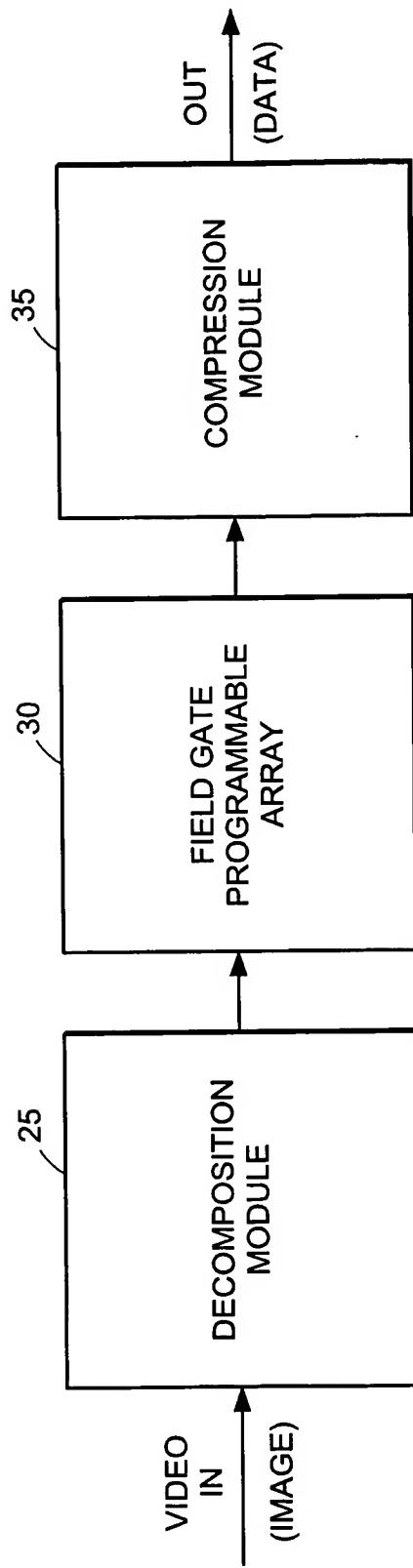


FIG. 2B

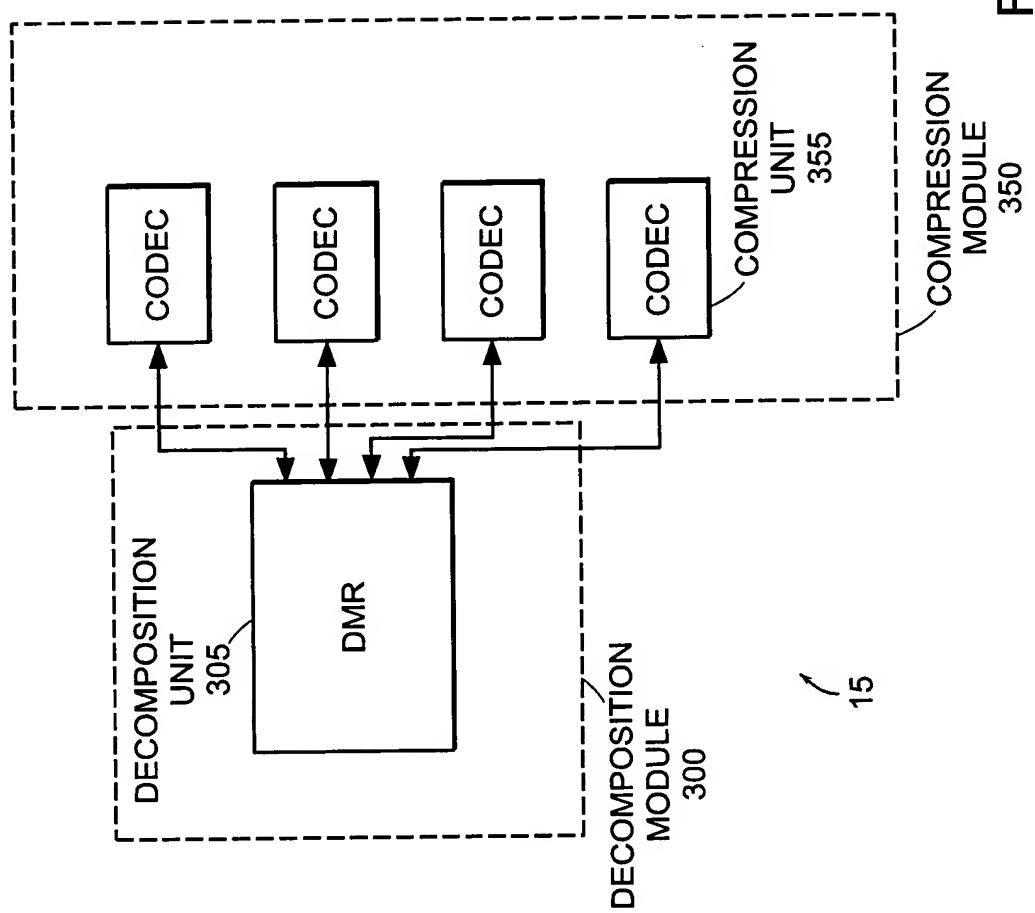


FIG. 3

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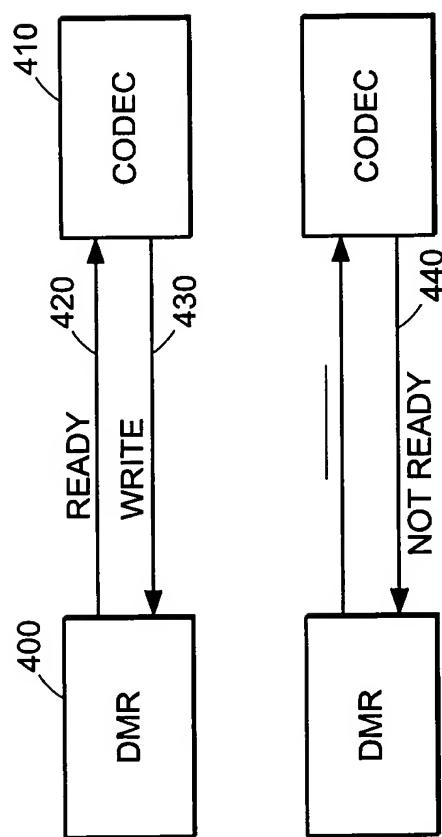


FIG. 4

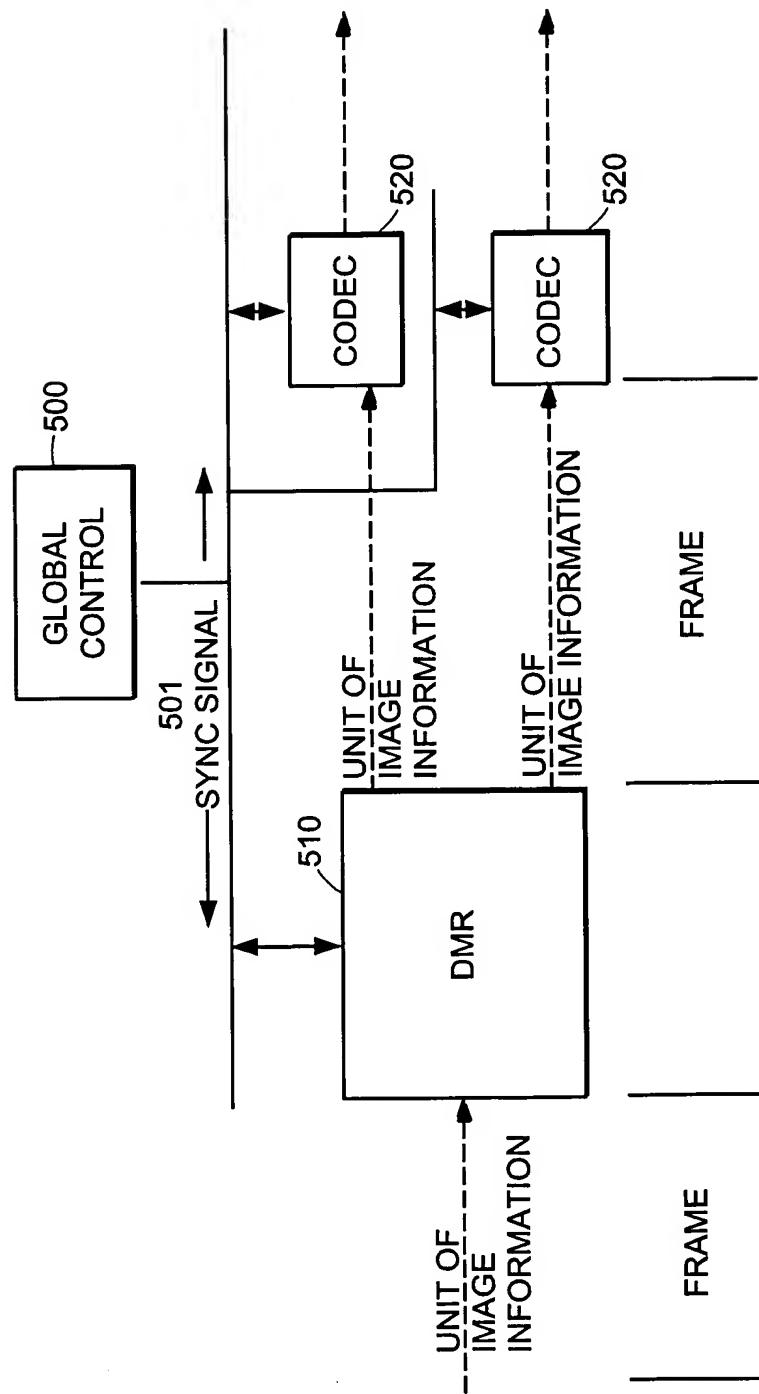


FIG. 5

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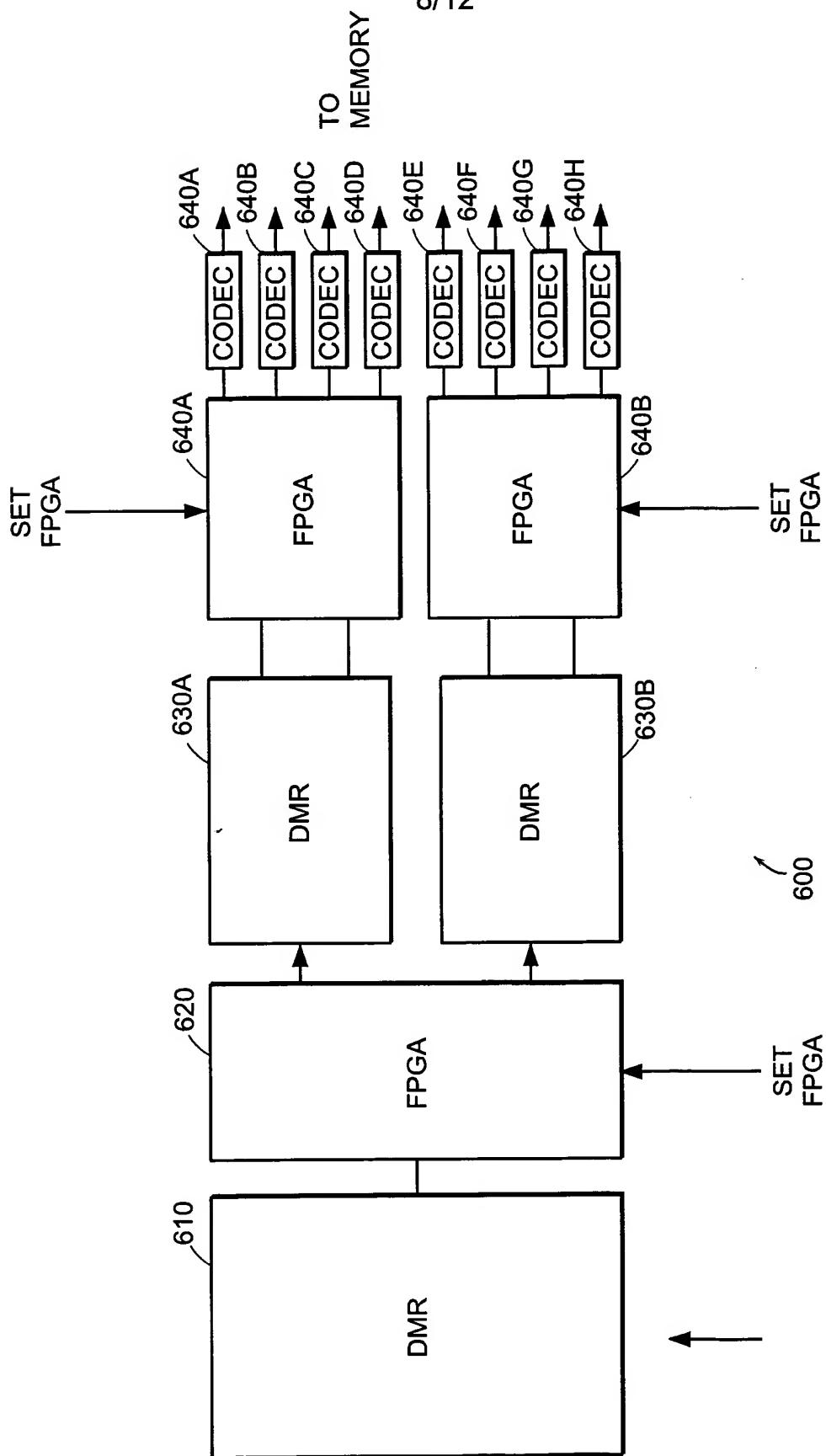


FIG. 6

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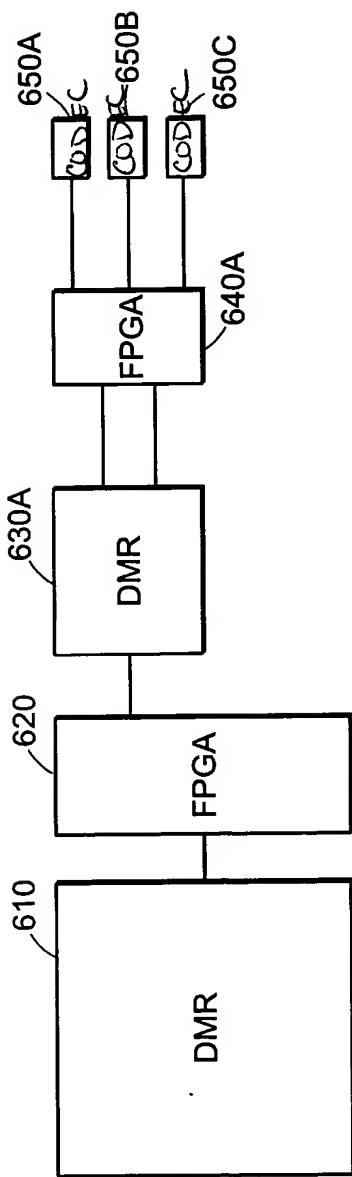


FIG. 7A

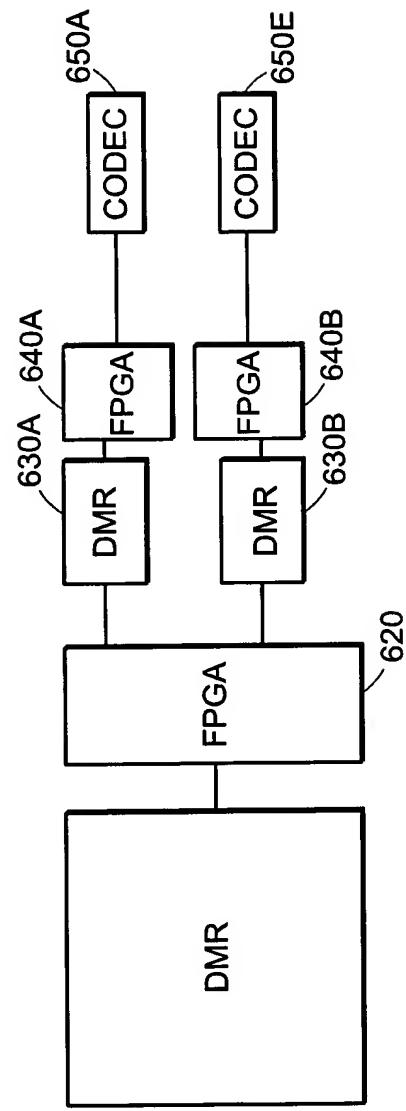


FIG. 7B

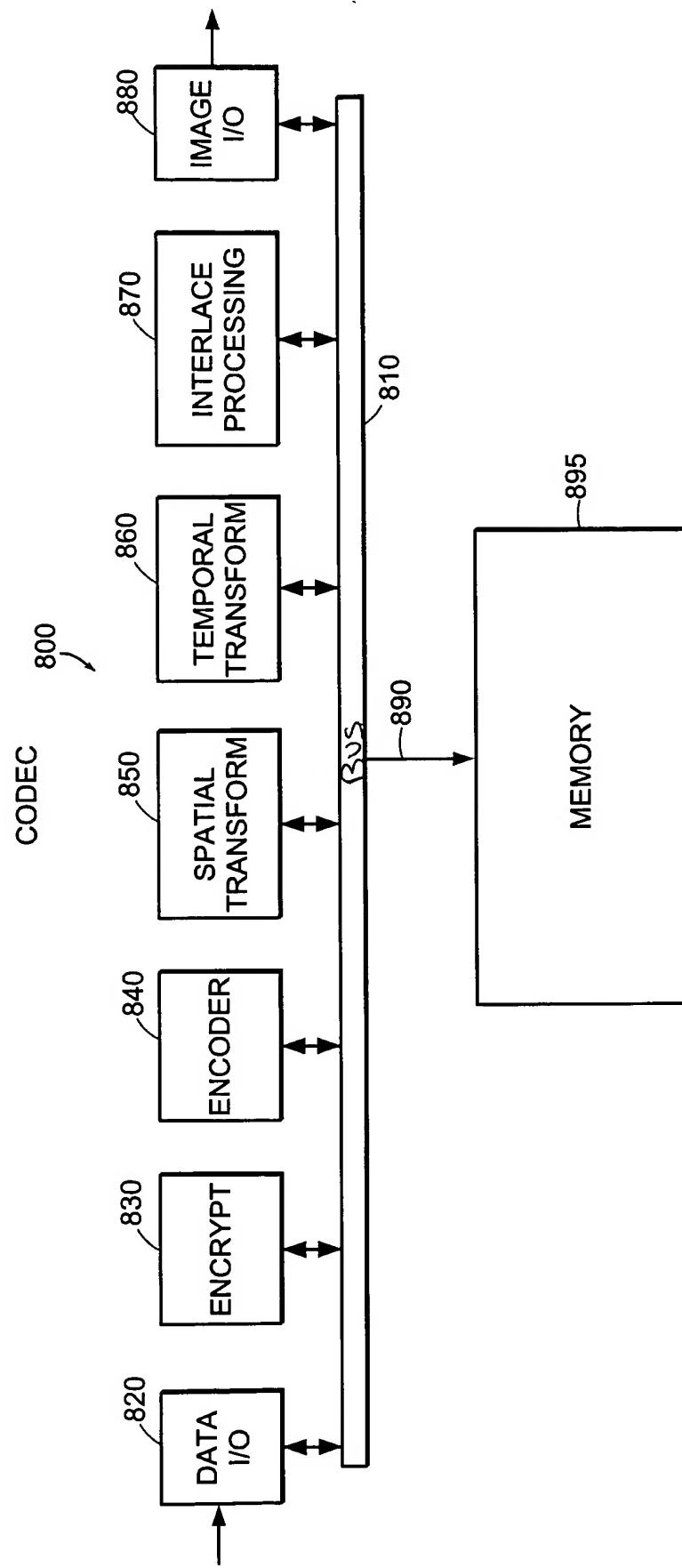


FIG. 8

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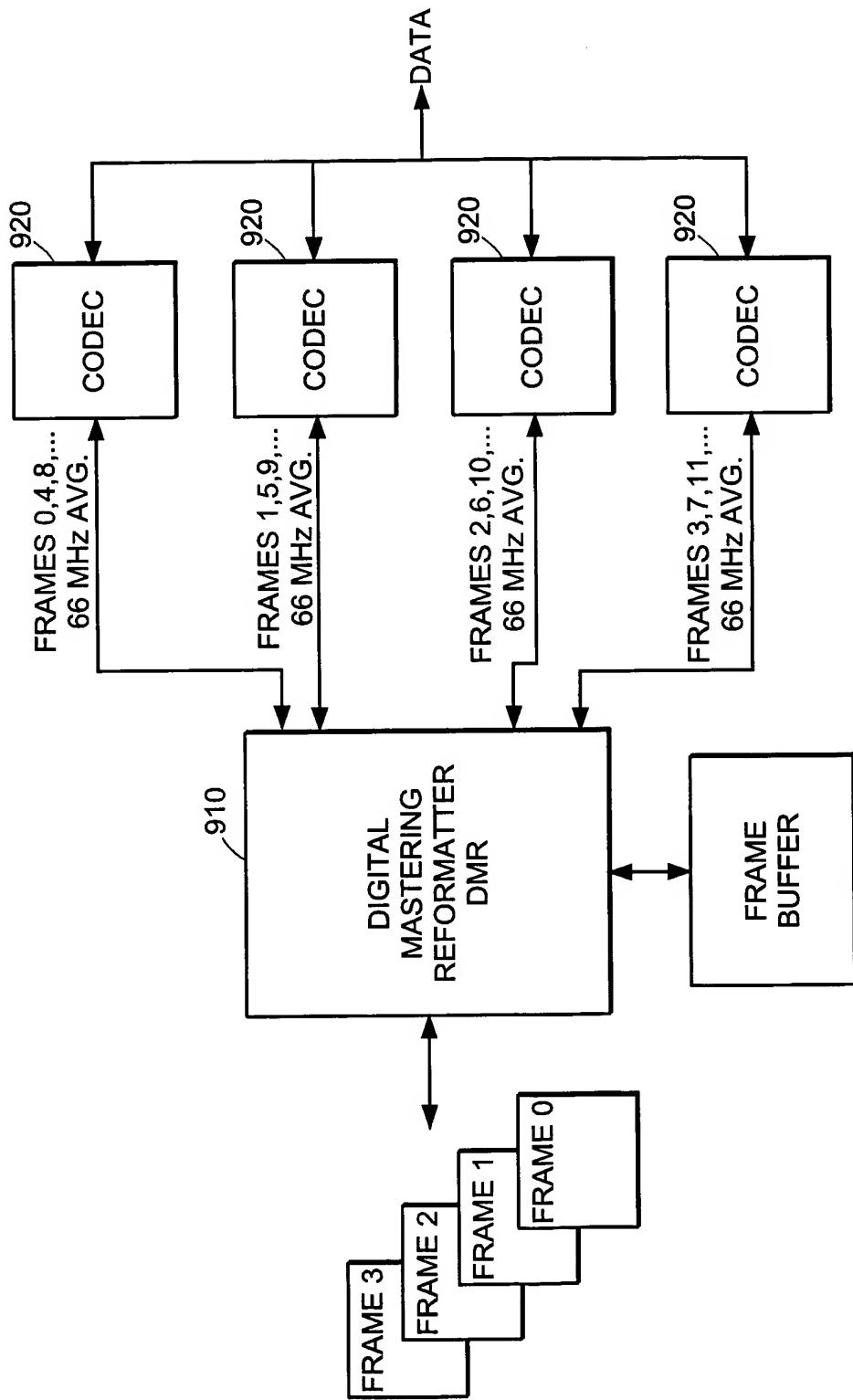


FIG. 9

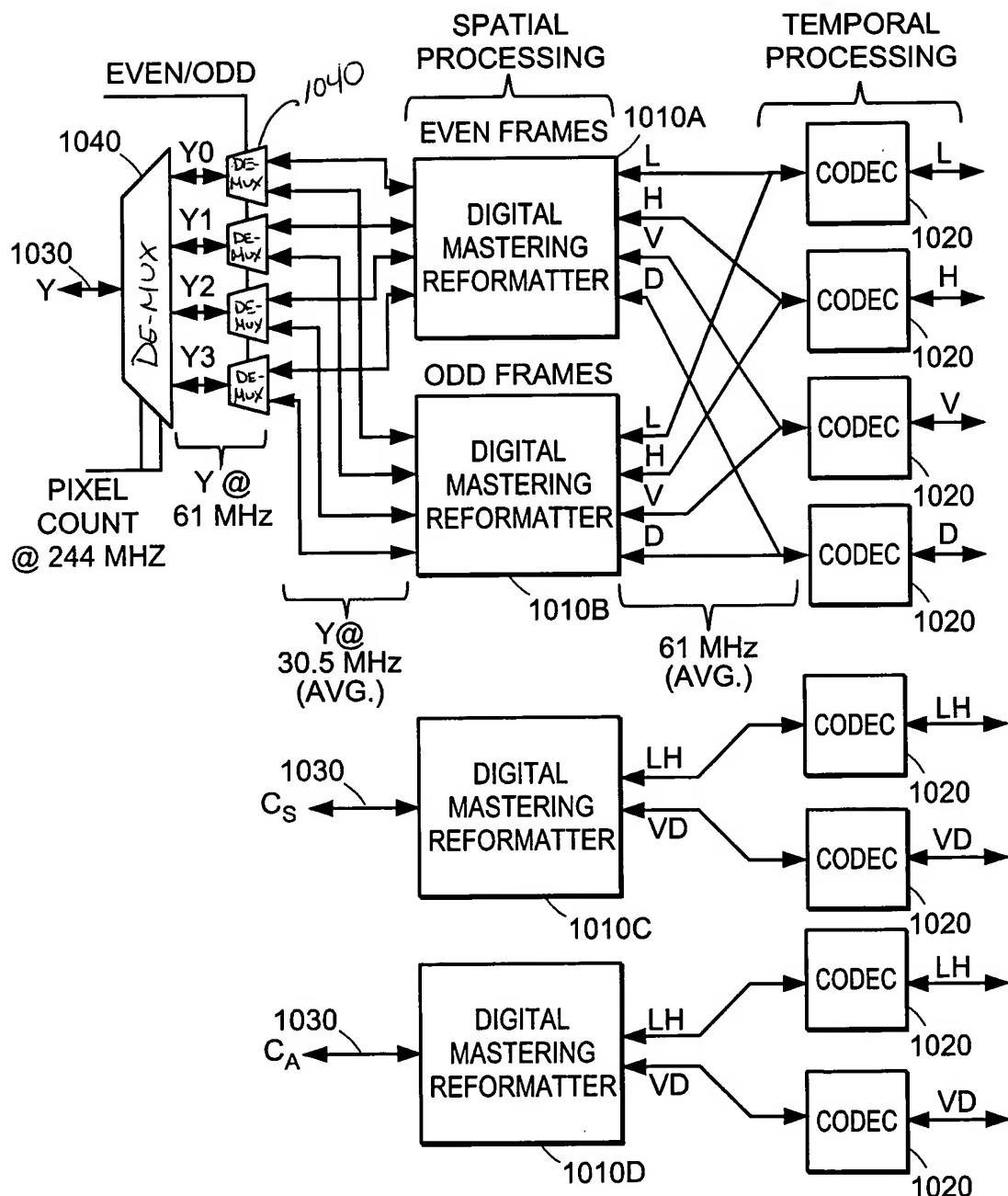


FIG. 10